SEQUENCE LISTING

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ē1	1031	当
(A)	None of	NET Y
	PRADE	

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(1) GENERAL INFORMATION:

(i) APPLICANT: Carter, Paul J. Presta, Leonard G.

(ii) TITLE OF INVENTION: Immunoglobulin Variants

10 (iii) NUMBER OF SEQUENCES: 10

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Genentech, Inc.

(B) STREET: 460 Point San Bruno Blvd

(C) CITY: South San Francisco

(D) STATE: California

(E) COUNTRY: USA

(F) ZIP: 94080

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: patin (Genentech)

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 07/715,272

(B) FILING DATE: 14-June-1991

(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER:

(B) FILING DATE:

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Adler, Carolyn R.

(B) REGISTRATION NUMBER: 32,324

(C) REFERENCE/DOCKET NUMBER: 709

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 415/266-2614

(B) TELEFAX: 415/952-9881

(C) TELEX: 910/371-7168

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Asn

Thr Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys

Leu Leu Ile Tyr Ser Ala Ser Phe Leu Glu Ser Gly Val Pro Ser

	Arg	Phe	Ser	Gly	Ser 65	Arg	Ser	Gly	Thr	Asp 70	Phe	Thr	Leu	Thr	Ile 75
5	Ser	Ser	Leu	Gln	Pro 80	Glu	Asp	Phe	Ala	Thr 85	Tyr	Tyr	Сув	Gln	Gln 90
	His	Tyr	Thr	Thr	Pro 95	Pro	Thr	Phe	Gly	Gln 100	Gly	Thr	Lys	Val	Glu 105
10	Ile	Lys	Arg	Thr 109											
•	(2)	INFO	RMAT:	ION 1	FOR S	SEQ :	ID NO	0:2:							
15		(1	A) LI B) T	NCE (ENGTI YPE: OPOL(H: 13	20 ar	mino cid		ls						•
20	(x:	i) Si	EQUEI	NCE I	DESCI	RIPT	ON:	SEQ	ID I	NO:2	:				
	Glu 1	Val	Gln	Leu	Val 5	Glu	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15
25	Gly	Ser	Leu	Arg	Leu 20	Ser	Сув	Ala	Ala	Ser 25	Gly	Phe	Asn	Ile	Lys 30
30	Asp	Thr	Tyr	Ile	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu 45
	Glu	Trp	Val	Ala	Arg 50	Ile	Tyr	Pro	Thr	Asn 55	Gly	Tyr	Thr	Arg	Tyr 60
35	Ala	Asp	Ser	Val	Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Ala	Asp	Thr	Ser 75
	Lys	Asn	Thr	Ala	Tyr 80	Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Asp 90
40	Thr	Ala	Val	Tyr	Tyr 95	Сув	Ser	Arg	Trp	Gly 100	Gly	Asp	Gly	Phe	Tyr 105
45	Ala	Met	Asp	Val	Trp 110	Gly	Gln	Gly	Thr	Leu 115	Val	Thr	Val	Ser	Ser 120
	(2)	INFO	RMAT:	ION 1	FOR S	SEQ :	ID NO	0:3:							
50	(:	(1	A) LI B) Ti	NCE (ENGTI YPE: OPOL	H: 10 ami	09 ar	nino cid		ds						
	(x.	i) S	EQUEI	NCE I	DESC	RIPT:	ion:	SEQ	ID 1	NO: 3	:				
55	Asp 1	Ile	Gln	Met	Thr 5	Gln	Ser	Pro	Ser	Ser 10	Leu	Ser	Ala	Ser	Val 15
60	Gly	Asp	Arg	Val	Thr 20	Ile	Thr	Сув	Arg	Ala 25	Ser	Gln	Asp	Val	Ser 30
	Ser	Tyr	Leu	Ala	Trp 35	Tyr	Gln	Gln	Lys	Pro 40	Gly	Lys	Ala	Pro	Lys 45

•	Leu	Leu I	e Tyr	Ala 50	Ala	Ser	Ser	Leu	Glu 55	Ser	Gly	Val	Pro	Ser 60
٠5	Arg	Phe S	er Gly	Ser 65	Gly	Ser	Gly	Thr	Asp 70	Phe	Thr	Leu	Thr	Ile 75
	Ser	Ser L	eu Gln	Pro 80	Glu	Asp	Phe	Ala	Thr 85	Tyr	Tyr	Сув	Gln	Gln 90
10	Tyr	Asn S	er Leu	Pro 95	Tyr	Thr	Phe	Gly	Gln 100	Gly	Thr	Lys	Val	Glu 105
15	Ile	Lys A	g Thr 109											
	(2)	INFORM	MOITA	FOR	SEQ :	ID NO	0:4:							
20	(:	(B)	JENCE LENGT TYPE: TOPOL	H: 1: ami:	20 ar	nino cid		is						
	(x.	i) SEQ	JENCE	DESC	RIPT:	ON:	SEQ	ID 1	NO:4	:				
25	Glu 1	Val G	n Leu	Val 5	Glu	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15
30	Gly	Ser L	eu Arg	Leu 20	Ser	Сув	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Ser 30
	Asp	Tyr A	.a Met	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu 45
35	Glu	Trp V	al Ala	Val 50	Ile	Ser	Glu	Asn	Gly 55	Gly	Tyr	Thr	Arg	Tyr 60
	Ala	Asp S	er Val	Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Ala	Asp	Thr	Ser 75
40	Lys	Asn T	nr Ala	Tyr 80	Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Asp 90
45	Thr	Ala V	ıl Tyr	Tyr 95	Сув	Ser	Arg	Trp	Gly 100	Gly	Asp	Gly	Phe	Tyr 105
	Ala	Met A	sp Val	Trp 110	Gly	Gln	Gly	Thr	Leu 13.5	Val	Thr	Val	Ser	Ser 120
50	(2)	INFORM	ATION	FOR	SEQ :	ID NO	D:5:							
	(:	i) SEQI (A)	JENCE LENGT					ds						
55			TYPE:											
	(x.	i) SEQ	JENCE	DESC	RIPT:	ion:	SEQ	ID 1	NO:5	:				
60	Asp 1	Ile V	al Met	Thr 5	Gln	Ser	His	Lys	Phe 10	Met	Ser	Thr	Ser	Val 15
	Gly	Asp A	g Val	Ser 20	Ile	Thr	Сув	Lys	Ala 25	Ser	Gln	Asp	Val	Asn 30

	Thr	Ala	Val	Ala	Trp 35	Tyr	Gln	Gln	ГЛЯ	Pro 40	Gly	His	Ser	Pro	Lys 45
5	Leu	Leu	Ile	Tyr	Ser 50	Ala	Ser	Phe	Arg	Tyr 55	Thr	Gly	Val	Pro	Asp 60
	Arg	Phe	Thr	Gly	Asn 65	Arg	Ser	Gly	Thr	Asp 70	Phe	Thr	Phe	Thr	Ile 75
10	Ser	Ser	Val	Gln	Ala 80	Glu	Asp	Leu	Ala	Val 85	Tyr	Tyr	Сув	Gln	Gln 90
15	His	Tyr	Thr	Thr	Pro 95	Pro	Thr	Phe	Gly	Gly 100	Gly	Thr	Lys	Leu	Glu 105
	Ile	Lys	Arg	Ala 109											
20	• •	i)		NCE (ENGTI YPE:	CHARI H: 12 amin	ACTEI 20 ar	RIST: mino cid	cs:	is						
.25	(x	i) S	EQUE	NCE I	DESCI	RIPT	ON:	SEQ	ID 1	10:6:	:				
30	Glu 1	Val	Gln	Leu	Gln 5	Gln	Ser	Gly	Pro	Glu 10	Leu	Val	Lys	Pro	Gly 15
	Ala	Ser	Leu	Lys	Leu 20	Ser	Сув	Thr	Ala	Ser 25	Gly	Phe	Asn	Ile	Lys 30
35	Asp	Thr	Tyr	Ile	His 35	Trp	Val	Lys	Gln	Arg 40	Pro	Glu	Gln	Gly	Leu 45
	Glu	Trp	Ile	Gly	Arg 50	Ile	Tyr	Pro	Thr	Asn 55	Gly	Tyr	Thr	Arg	Tyr 60
40	Asp	Pro	Lys	Phe	Gln 65	Asp	Lys	Ala	Thr	Ile 70	Thr	Ala	Asp	Thr	Ser 75
45	Ser	Asn	Thr	Ala	Tyr 80	Leu	Gln	Val	Ser	Arg 85	Leu	Thr	Ser	Glu	Asp 90
	Thr	Ala	Val	Tyr	Tyr 95	Сув	Ser	Arg	Trp	Gly 100	Gly	Asp	Gly	Phe	Tyr 105
50	Ala	Met	Asp	Tyr	Trp 110	Gly	Gln	Gly	Ala	Ser 115	Val	Thr	Val	Ser	Ser 120
	(2)	INFO	RMAT:	ION I	FOR S	SEQ :	ID NO	7:							
55	((1	EQUEI A) LI B) T' C) S'	engti YPE: TRANI	H: 2' nuc: DEDNI	7 bas leic ESS:	ses acio sino	i		·					
60	1.0	i) Si	ישווחי	יו יארטע	うおくご	ያቸውጥ	TON .	SEC	י חד	۱ ۵۰ ۰	,				

TCCGATATCC AGCTGACCCA GTCTCCA 27

	(2) INFORMATION FOR SEQ ID NO:8:
*5 / \ <u>_</u>	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 31 bases (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear
10	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
15	GTTTGATCTC CAGCTTGGTA CCHSCDCCGA A 31
	(2) INFORMATION FOR SEQ ID NO:9:
20	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 22 bases (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear
25	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:
30	AGGTSMARCT GCAGSAGTCW GG 22
	(2) INFORMATION FOR SEQ ID NO:10:
35	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 34 bases(B) TYPE: nucleic acid(C) STRANDEDNESS: single(D) TOPOLOGY: linear
40	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:
45	TGAGGAGACG GTGACCGTGG TCCCTTGGCC CCAG 34